

Enclosure 1

**Financial Report
For \$4,758,000 Appropriation, Fiscal Year 2001
Bureau of Reclamation**

At the direction of the Senate Energy and Water Development Appropriations Subcommittee (Senate Report 107-39), the Bureau of Reclamation (Reclamation) has compiled a status report for the \$4.758 million in Fiscal Year 2001 funds appropriated to Reclamation to undertake research, monitoring, and modeling of evapotranspiration, implement a program for the transplant of silvery minnow larvae and young-of-year for silvery minnow propagation, carry out habitat conservation and restoration in the middle Rio Grande River valley, and address complex issues related to recovery activities along the Rio Grande in New Mexico through a single comprehensive group. Additional funding was provided for Reclamation participation in the Year 2000, mediated agreement (Agreed Order) associated with the Rio Grande Silvery Minnow (RGSM) v. Martinez (now Keys) lawsuit.

This report provides information on distribution of funds by activity, a brief description of each activity, and approximate completion schedule for each activity. Of the total of \$4,758,000 FY 2001 appropriation, \$2,337,561 was expended and \$2,420,439 is obligated but not yet expended.

The funded activities contribute to Reclamation's ability to meet critical goals: continue the efforts of the Middle Rio Grande Collaborative Program Workgroup and its support activities to water users and species along the Middle Rio Grande, promote long and short term activities to benefit species and water users along the Middle Rio Grande, and achieve success in the recovery of the RGSM and the southwestern willow flycatcher (SWWF).

The activities that received funding are listed below:

\$4,758,000 Appropriated	Main Funding Categories	Expended in 2001	Obligated in 2001 but not expended
\$1,000,000	Agreed Order Activities	\$1,000,000	\$0
\$ 500,000	Evapotranspiration (ET) Workgroup	\$427,961	\$72,039
\$1,758,000	Middle Rio Grande Collaborative Program	\$787,650	\$970,350
\$1,500,000	Middle Rio Grande Restoration Initiative	\$121,950	\$1,378,050

\$1,000,000 Agreed Order Activities

\$880,000 Staff Salaries: Funds were utilized by Reclamation for personnel salaries for completion of mediation activities: including planning, construction, and operation and maintenance of pumping from the Low Flow Conveyance Channel, supplemental water leasing, habitat restoration, fish passage.

\$120,000 Rio Grande Supplemental Water Programmatic Environmental Assessment: Funds were utilized by Reclamation for completion of the Rio Grande Supplemental Water Programmatic Environmental Assessment which analyzed a water management program that would provide supplemental water to the Rio Grande for approximately five years to primarily benefit the RGSM.

\$500,000 Evapotranspiration (ET) Work Group

\$500,000 Evapotranspiration (ET) Research and Applications, Reclamation Albuquerque Area Office: Reclamation provided funding to New Mexico State University, University of Iowa, Department of Agriculture-Agricultural Research Station, Los Alamos National Laboratories, and Reclamation-Technical Service Center, Denver, Colorado on a 50/50 grant/matching funds basis. Research supports improvements to the ET Toolbox, a WEB-based decision support system providing direct decision support to water managers and users of the Rio Grande. ET Toolbox provides data to the Upper Rio Grande Water Operations Model (URGWOM). The ET Toolbox allows water users to more accurately predict their daily water requirements, and thus more accurately determine their required diversions, potentially leaving more water in the river. The URGWOM will allow water managers to make better release decisions and meet downstream flow targets in support of RGSM and SWWF recovery efforts. Current year funds were expended in an attempt to improve on open-water evaporation estimates for Elephant Butte Reservoir, and continued data collection on Cottonwood ET at the Bosque del Apache. Project completion date is subject to future funding levels, but generally anticipated to be approximately five additional years.

\$1,758,000 Middle Rio Grande Collaborative Program

The purpose of the Program is to provide conditions that will prevent extinction, preserve reproductive integrity, improve habitat, and contribute to recovery of the RGSM in the Middle Rio Grande and the SWWF in the Rio Grande basin between the Colorado state line and Elephant Butte Reservoir. Actions undertaken by the Program will benefit other protected species, maintain wild populations, improve the efficiency of water use and management, and provide water to sustain the listed species. These actions may also benefit the ecological integrity of the Rio Grande region; and to implement creative and flexible options under the ESA so that existing, ongoing, and future water supply and water resources management activities and projects can continue to operate and receive necessary permits, licenses, funding, and other approvals so that signatories to the

Memorandum of Understanding and all other water users are deemed to be in compliance with the Endangered Species Act (ESA).

\$258,000 Salvage, Transplant, and Propagation Activities for Conservation of the RGSM: Funding was provided to the Fish and Wildlife Service (Service) for expanded efforts for captive propagation, salvage, and transplant of RGSM related to Middle Rio Grande water management and compliance with ESA requirements. The project has focused on establishing refugial populations to ensure the survival of this species in a time of significantly reduced abundance and distribution. This work involved capture and translocation of wild RGSM, rearing and maintenance of refuge stocks. Facilities include Dexter and Mora National Fish Hatchery and Technology centers (NFHTC), Fishery Resources Office (FRO), and the Warmwater Fish Culture Facility at New Mexico State University (NMSU). Currently 70,000 silvery minnows are distributed among these facilities. FRO has supported salvage efforts by providing staff for recovering silvery minnows from pools during drying periods on the Rio Grande. Approximately 4000 silvery minnows were collected by FRO at the end of June to supplement refugial populations. Transplantation of minnows will occur in fall 2001 following completion of stocking guidelines depending on the availability of juveniles for stocking.

\$650,000 Conservation Water Agreement: Funds were utilized for fulfillment of the Conservation Water Agreement negotiated amongst the State of New Mexico acting through the New Mexico Interstate Stream Commission and the New Mexico Attorney General, and the United States of America, acting through the Army Corps of Engineers and the United States Department of the Interior, Bureau of Reclamation. This project will reduce the risk that conditions in the Middle Rio Grande for the next three years will result in a finding that the continued existence of listed species under ESA are jeopardized. The funds make possible timed release of conservation water stored in upstream reservoirs into the Rio Grande for benefit of the RGSM during the 2002 irrigation season.

\$500,000 Low Flow Conveyance Channel (LFCC) Pumping Program: Funds were utilized to purchase six new pumps to enable Reclamation to pump water from the LFCC into the Rio Grande. The pumping program is an essential activity that is required during releases of available supplemental water to benefit the Rio Grande silvery minnow and Southwestern willow flycatcher. Funds were used for operation and maintenance of the pumping operation during the 2001 irrigation season in which water was pumped from the LFCC into the Rio Grande in order to enhance river flows.

\$75,000 Rio Grande Silvery Minnow (RGSM) Movement Study: This project will assess movement patterns by marked groups of RGSM to provide data on home range, distance traveled, and schooling behavior. The RGSM reproductive strategy, in combination with the diversion dams, indicates movement of RGSM eggs and larvae from upstream to downstream segments coupled with the mobility of adult fish to return upstream due to main-stem barriers. Development of a cost effective and effective mark-recapture

procedure will facilitate other research studies delineated in the RGSM recovery plan. Marking of specimens will begin in October 2001. Active collecting will be conducted regularly at each study site. Release of marked hatchery reared specimens will be coordinated between appropriate federal and state resource agencies. Sampling will continue through 2002 in conjunction with population monitoring.

\$65,000 Assessment of Behavior and Swimming Ability of RGSM, for Design of Fish Passage Structures: This study assesses the behavior and swimming performance of RGSM for designing fish passage structures (fish ways) for diversion dams to evaluate potential of reestablishing upstream pathways for RGSM. Unobstructed dispersal routes are important because RGSM produce semi-buoyant eggs and larvae that drift long distances downstream. Little is known about passage characteristics of small-bodied stream fish that evolved in a low gradient riverine system without turbulent flow. Factors that influence the probability of successful passage through a low-gradient flume will be evaluated. The study will begin in fall 2001 when reduced water temperatures minimize mortality when transporting silvery minnows, with the preliminary report expected in March 2002.

\$50,000 Habitat Restoration Plan: Funds utilized to develop a Habitat Restoration Plan for long term planning encompassing the reach of the Rio Grande pertinent to the RGSM and SWWF. The plan will develop criteria to use to select restoration sites and activities as well as methodology for developing specific restoration plans and prioritizing the sites. Efforts are ongoing.

\$25,000 Water Quality Assessment: In an effort to better understand the decline of the RGSM population, the Service was provided these funds to obtain requisite scientific information regarding surface-water quality. The Service's New Mexico Ecological Services Field Office (NMESFO) utilized funds to prepare a Sampling and Analysis Plan, which includes implementation of a water-quality monitoring network and performance of a water-quality assessment of RGSM habitat within the Middle Rio Grande. This plan will be used to provide structure and guidance for project implementation in future years. Historic and new hydro-geologic data will be compiled/collected in order to gain a better understanding of the geo-hydrology and water-quality of this reach of the Middle Rio Grande. The end uses of the assessment will promote long-term ecosystem management strategies, including requisite environmental monitoring network design. Of concern are the endangered RGSM, as well as other riparian and aquatic habitat, within areas of potentially degraded surface water. Efforts are ongoing.

\$50,000 Middle Rio Grande Endangered Species Act Collaborative Program Coordinator: Funds were provided to the Service for a Program Coordinator and necessary staff to coordinate the activities of the Middle Rio Grande Endangered Species Act Collaborative Program (Program) for the 4th quarter of FY2001. This included serving as liaison between the Program and recovery teams, monitoring Program action items and activities, disseminating information to interested parties, maintaining the listserv and mailing lists, and maintaining records on Program activities.

\$85,000 Fish Passage and River Reconnectivity: Funding was utilized by Reclamation to prepare a comprehensive study plan to evaluate a full suite of fish passage and river reconnection alternatives for the San Acacia Diversion Dam. Development of the study plan required investigation of water delivery infrastructure and operations. This effort is intended to complement and build upon work already ongoing by S. S. Papadopoulos and Associates (SSPA), Dr Ramchand Oad of Colorado State University (CSU), and the New Mexico Interstate Stream Commission (NMISC). Main objectives of this activity are improving water delivery to the Socorro Division of the Middle Rio Grande Conservancy District and addressing concerns for endangered species that depend upon Rio Grande flows, including: identification and evaluation of alternative structures, and modifications, or changes in operating procedures for each element of the infrastructure that currently supplies water to the Socorro Division. Efforts include: identify, inventory, and evaluate the design and function of each element of the existing infrastructure that currently supplies or could supply water to the Socorro Division. Efforts are ongoing.

\$1,500,000 Middle Rio Grande Restoration Initiative:

\$667,000 Habitat Restoration Project at the Pueblo of Santa Ana: The overall habitat restoration objectives of the Pueblo of Santa Ana are to improve fluvial conditions in the Rio Grande and to restore diverse riparian communities along the river floodplain for a variety of wildlife species, including the SWWF and RGSM. Flood control and river channelization projects implemented during the last 50 years limit the potential for fully restoring the river and its hydrologic connection to the historic floodplain. However, opportunities exist for fluvial and floodplain restoration that will improve fish and wildlife habitat. To meet these objectives, the Pueblo of Santa Ana is working with Federal and State agencies and private foundations to develop, design and implement realistic restoration programs on the Pueblo and in the basin. The Pueblo of Santa Ana is demonstrating success in its restoration program through a recently completed 350 acre "Phase 1 restoration" floodplain restoration project, an ongoing 2 mile fluvial restoration project with Reclamation, and is continuing to propose further restoration projects as a 4 mile fluvial restoration project with the Corps of Engineers, and through this proposal for a "Phase 2 restoration" habitat restoration partially funded by Reclamation. Planning efforts are ongoing. This is a multi-year effort.

\$594,500 Pueblo of Sandia, Bosque Restoration and Water Quality Monitoring Project: This project is a continuation of a pilot study done by Sandia Pueblo to assess the feasibility of rehabilitating portions of its Rio Grande Bosque. The objectives of the rehabilitation program are the removal of non-native species (salt cedar and Russian olive), the re-establishment of native species (cottonwoods, willows, and grasses); the creation of habitat for the RGSM, jetty jack removal, and extensive water quality monitoring of the Rio Grande. The FY 2001 bosque restoration activity of approximately 40 acres is a multi-year effort by the Pueblo involving vegetation typing, ground water level monitoring, soil mapping, and habitat creation planning and feasibility. Determining problems with water quality along a 9-mile reach of the Rio Grande within the Pueblo will help ensure the success of any future reintroduction efforts of the silvery

minnow. The Project will help restore habitat for both the SWWF and RGSM. The work will, for the most part be accomplished by the Pueblo. Planning efforts are ongoing. This is a multi-year effort.

\$50,000 Rio Grande Restoration, Bosque Restoration Demonstration Project: This project consists of conducting a demonstration project within the City of Albuquerque. A 20-acre area has been divided in half. One 10 acre will be left as it is today. The other 10-acre area will undergo a restoration project under which all non-native vegetation and jetty jacks will be removed. After the removal of the non-native vegetation, the planting of native vegetation will be done. The two areas will provide a comparison to the public of how the Bosque area can be modified. The demonstration project will include an education component to the public and the school system. Work is ongoing. Completion is anticipated in early 2002.

\$188,500 Bosque Restoration Planning Project with the Pueblo of San Felipe: This activity included the preparation of a Bosque Restoration Plan that benefits the SWWF. This project consists of controlling downstream flooding and handling increased flows in the existing irrigation system in a manner that would sufficiently increase natural return flow back to the river. The removal of non-native species from areas within the Pueblo and adjacent to the irrigation system plus the introduction of native species will improve the land along the river. Planning efforts are ongoing. This is a multi-year effort.